

What is claimed is:

1 1. A method of providing voice responses to commands comprising the steps of:
2 receiving a first command;
3 selecting a first processing option in response to said first command;
4 providing a voice message indicative of said first processing option selected;
5 providing a silent delay period of a predetermined duration immediately subsequent
6 to a completion of said step of providing a voice message; and
7 selectively (i) initiating alternate processing in response to a receipt of a second
8 command input during said silent delay period, and (ii) initiating said first processing
9 option in response to an absence of said second command input for a duration of said silent
10 delay period.

1 2. The method according to claim 1 wherein said duration of said silent delay period
2 is in a range of 1.2 to 2.3 seconds.

1 3. The method according to claim 2 wherein said duration of said silent delay period
2 is in a range of 1.5 to 2.0 seconds.

1 4. The method according to claim 3 wherein said duration of said silent delay period
2 is 1.8 seconds.

1 5. The method according to claim 1 wherein said first command comprises a speech
2 input

1 6. A method of telephone dialing using a voice activated dialer including a directory
2 of subscriber names and telephone numbers, the method comprising the steps of:
3 selecting one of said subscribers most closely corresponding to a first speech input;
4 providing a speech output corresponding to the selected one of said subscribers;
5 providing a silent delay period of a predetermined duration immediately subsequent
6 to a completion of said step of providing a speech output; and
7 selectively (i) initiating alternate processing in response to a receipt of a command
8 input during said silent delay period, and (ii) dialing the telephone number
9 corresponding to the selected one of said subscribers immediately after said
10 delay period and in response to an absence of said command input for a
11 duration of said silent delay period.

1 7. The method according to claim 6 wherein said duration of said silent delay period
2 is in a range of 1.2 to 2.3 seconds.

1 8. The method according to claim 7 wherein said duration of said silent delay period
2 is in a range of 1.5 to 2.0 seconds.

1 9. The method according to claim 8 wherein said duration of said silent delay period
2 is 1.8 seconds.

1 10. The method according to claim 6 wherein said command input comprises a DTMF
2 audio signal.

1 11. The method according to claim 6 wherein said command input comprises a second
2 speech input and said method further comprises a step of listening for said second speech
3 input.

1 12. The method according to claim 11 wherein said second speech input comprises a
2 predetermined spoken command.

1 13. The method according to claim 11 wherein said second speech input comprises one
2 of a plurality of predetermined spoken commands.

1 14. The method according to claim 11 wherein said step of listening includes
2 recognizing said second speech input to provide speech content data and comparing said
3 speech content data with a list of alternative processing commands.

1 15. The method according to claim 11 further comprising the steps of:
2 receiving said first speech input;
3 recognizing a content of said first speech input; and
4 comparing said content with said directory.

1 16. The method according to claim 15 wherein said command input comprises a second
 2 speech signal and said method further comprises a step of listening for said second speech
 3 input.

1 17. The method according to claim 16 wherein said step of listening includes the steps
 2 of:
 3 receiving said second speech input;
 4 recognizing a content of said second speech input; and
 5 comparing said content with a list of alternative processing commands.

1 18. The method according to claim 16 wherein said duration of said silent delay period
 2 is in a range of 1.2 to 2.3 seconds.

1 19. The method according to claim 18 wherein said duration of said silent delay period
 2 is in a range of 1.5 to 2.0 seconds.

1 20. The method according to claim 19 wherein said duration of said silent delay period
 2 is 1.8 seconds.

1 21. The method according to claim 16 wherein said step of providing a speech output
 2 includes retrieving audio data corresponding to said selected one of said subscribers and
 3 converting said audio data into said speech output.

1 22. The method according to claim 21 wherein said step of converting said audio data
2 into said speech output includes decoding said audio data.

1 23. The method according to claim 21 wherein said step of converting said audio data
2 into said speech output includes concatenating a plurality of phonemes.

1 24. The method according to claim 21 wherein said step of converting said audio data
2 into said speech output includes a step of synthesizing speech from said audio data.

1 25. The method according to claim 6 wherein said alternate processing includes
2 providing a speech output corresponding to the telephone number of said selected one of
3 said subscribers.

1 26. The method according to claim 6 wherein said alternate processing includes
2 providing an alternate telephone number of said selected one of said subscribers.

1 27. The method according to claim 26 including dialing said alternate telephone number
2 of said selected one of said subscribers and supplying a data signal corresponding to said
3 selected one of said subscribers to a remote system.

1 28. The method according to claim 27 wherein said data signal represents said telephone
2 number of said selected one of said subscribers.

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29. A method of telephone dialing using a voice activated dialer including a directory of subscriber names and telephone numbers, the method comprising the steps of:

receiving a first speech input;

recognizing said first speech input to provide first speech content data;

selecting one of said subscribers most closely corresponding to said first speech content data;

providing a speech output corresponding to the selected one of said subscribers;

providing a silent delay period of a predetermined duration within a range of 1.2 to 2.3 seconds immediately subsequent to a completion of said step of providing a speech output;

listening for a second speech input during said silent period;

recognizing said second speech input to provide second speech content data; and

selectively (i) initiating alternate processing in response to said second speech content data including an alternate processing command, and, otherwise, (ii) dialing the telephone number corresponding to the selected one of said subscribers immediately after said delay period.

30. The method according to claim 29 wherein said predetermined duration of said silent delay period is in a range of 1.5 to 2.0 seconds.

31. The method according to claim 30 wherein said predetermined duration of said silent delay period is 1.8 seconds.

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1 32. A voice response unit comprising:
2 means for receiving a first command;
3 means for selecting a first processing option in response to said first command;
4 means for providing a voice message indicative of said first processing option
5 selected;
6 means for providing a silent delay period of a predetermined duration immediately
7 subsequent to a completion of providing said voice message; and
8 means for selectively (i) initiating alternate processing in response to a receipt of
9 a second command input during said silent delay period, and (ii) initiating said first
10 processing option in response to an absence of said second command input for a duration
11 of said silent delay period.

1 33. The voice response unit according to claim 32 wherein said predetermined duration
2 is in a range of 1.2 to 2.3 seconds.

1 34. The voice response unit according to claim 33 wherein said predetermined duration
2 is in a range of 1.5 to 2.0 seconds.

1 35. The voice response unit according to claim 33 wherein said predetermined duration
2 of said silent delay period is 1.8 seconds.

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2 36. A voice activated dialer comprising:
a memory storing a directory of subscriber names and telephone numbers;

3 comparison means for selecting one of said subscribers most closely corresponding
4 to a first speech input;

5 speech output means for providing a speech output corresponding to the selected
6 one of said subscribers;

7 timer means for providing a silent delay period of a predetermined duration
8 immediately subsequent to a completion of providing said speech output; and

9 control means for selectively (i) initiating alternate processing in response to a
10 receipt of a command input during said silent delay period, and (ii) dialing the telephone
11 number corresponding to the selected one of said subscribers immediately after said delay
12 period and in response to an absence of said command input for a duration of said silent
13 delay period.

1 37. The voice activated dialer according to claim 36 wherein said duration of said silent
2 delay period is in a range of 1.2 to 2.3 seconds.

1 38. The voice activated dialer according to claim 37 wherein said duration of said silent
2 delay period is in a range of 1.5 to 2.0 seconds.

1 39. The voice activated dialer according to claim 38 wherein said duration of said silent
2 delay period is 1.8 seconds.

1 40. The voice activated dialer according to claim 36 wherein said command input
2 comprises a DTMF audio signal.

1 41. The voice activated dialer according to claim 36 wherein said command input
2 comprises a second speech input and said voice activated dialer further speech recognizer
3 means for listening for said second speech input.

1 42. The voice activated dialer according to claim 41 wherein said speech recognizer
2 means is responsive to a predetermined spoken command.

1 43. The voice activated dialer according to claim 41 wherein said speech recognizer
2 means is responsive to a plurality of predetermined spoken commands.

1 44. The voice activated dialer according to claim 41 wherein said recognizer means
2 includes means for processing said second speech input to provide speech content data and
3 means for comparing said speech content data with a list of alternative processing
4 commands.

1 45. The voice activated dialer according to claim 36 further comprising:
2 input means receiving said first speech input;
3 speech recognition means for recognizing a content of said first speech input; and
4 processing means for comparing said content with said directory.

1 46. The voice activated dialer according to claim 45 wherein said command input
2 comprises a second speech signal and said voice activated dialer further includes speech
3 recognition means for recognizing said second speech input.

1 47. The voice activated dialer according to claim 46 wherein said speech recognition
2 means includes:

3 an input receiving said second speech input;
4 speech processing means for recognizing a content of said second speech input; and
5 processor means for comparing said content with a list of alternative processing
6 commands.

1 48. The voice activated dialer according to claim 47 wherein said duration of said silent
2 delay period is in a range of 1.2 to 2.3 seconds.

1 49. The voice activated dialer according to claim 48 wherein said duration of said silent
2 delay period is in a range of 1.5 to 2.0 seconds.

1 50. The voice activated dialer according to claim 49 wherein said duration of said silent
2 delay period is 1.8 seconds.

1 51. The voice activated dialer according to claim 36 wherein said speech output means
2 includes a memory storing audio data corresponding to said selected one of said subscribers
3 and audio player means for converting said audio data into said speech output.

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52. A voice activated dialer comprising:

a memory storing a directory of subscriber names and telephone numbers;

a speech recognition engine receiving a speech input and providing content data

derived from said speech input signal;

a processor responsive to said content data for selecting one of said subscribers;

an audio output providing a speech signal corresponding to the selected one of said

subscribers; and

a timer providing a silent delay period of a predetermined duration immediately

subsequent to a completion of providing said speech signal,

wherein said processor selectively (i) initiates alternate processing in response to

a receipt of a command input during said silent delay period, and (ii) initiates a dialing of

the telephone number corresponding to the selected one of said subscribers immediately

after said delay period and in response to an absence of said command input for a duration

of said silent delay period.

53. The voice activated dialer according to claim 52 wherein said duration of said silent

delay period is in a range of 1.2 to 2.3 seconds.

54. The voice activated dialer according to claim 53 wherein said duration of said silent

delay period is in a range of 1.5 to 2.0 seconds.

55. A voice activated dialer comprising:

a memory storing a directory of subscriber names and telephone numbers;

a speech recognition engine responsive to a speech input for providing speech

content data; and

a processor responsive to said speech content data and to a set of instructions for

(i) selecting one of said subscribers most closely corresponding to first speech content data;

(ii) providing a speech output corresponding to the selected one of said subscribers;

(iii) providing a silent delay period of a predetermined duration within a range of 1.2 to 2.3 seconds immediately after providing said speech output;

(iv) initiating alternate processing in response to second speech content data including an alternate processing command, and, otherwise, (ii) dialing the telephone number corresponding to the selected one of said subscribers immediately after said delay period.

56. The voice activated dialer according to claim 55 wherein said predetermined duration of said silent delay period is in a range of 1.5 to 2.0 seconds.

57. The voice activated dialer according to claim 56 wherein said predetermined duration of said silent delay period is 1.8 seconds.